

REMARKS

Claims 1, 4-9, 11, 22, 23, 25 and 34 were presented for examination. Claims 1, 4-9, and 11 were rejected. Claim has1 been amended. Claims 22, 23, 25 and 34 have been cancelled. Support for the amendment can be found in paragraphs [0015], [0016] and [0039]. No new matter has been added.

Claim Rejections Under 35 U.S.C. § 102(b and e) and § 103(a)

Claims 1, 4-9 and 11 were rejected under 35 U.S.C. § 102(b and e) as anticipated by, or, in the alternative, under § 103(a) as obvious over Pennel or Elsner and under 35 U.S.C. § 103(a) as obvious over Pennell or Elsner alone or in view of Clark. Applicants respectfully traverse.

Claim 1 recites a method of heating a kiln used in the manufacture of producing cement clinker. A kiln is provided. A raw feed comprising limestone, clay and an organic waste/mineral by-product mixture is provided. A fuel comprising an organic waste/mineral by-product mixture to heat the kiln is burned. Ammonia is liberated from the organic waste/mineral by-product mixture during the burning of the fuel to reduce NO_x emissions from exhaust gases. The raw feed is heated to form cement clinker. The organic waste/mineral by-product mixture comprises an alkaline material, the organic waste being comprised of a material selected from the group consisting of dewatered sewage sludge filter cake, animal manure, pulp and paper waste, fermentation waste, shredded paper and cardboard, and food waste, the mineral by-product being comprised of a coal combustion by-product comprising one or more materials selected from the group consisting of fly ash, bottom ash, fluidized bed ash, boiler slag and flue gas desulfurization by-products..

Pennell recites a method of making Portland cement. However, Pennell fails to disclose liberating ammonia from the organic waste/mineral by-product mixture during the burning of the fuel to reduce NO_x emissions from exhaust gases. Therefore, Applicants believe that claim 1 is

not anticipated by Pennell and request the withdrawal of the rejection to claim 1.

Elsner recites an improved method for the production of hydraulic lime and cement from combustion residues of sewage, canal-sludge or the like. However, Elsner also fails to disclose liberating ammonia from the organic waste/mineral by-product mixture during the burning of the fuel to reduce NO_x emissions from exhaust gases. Therefore, Applicants believe that claim 1 is also not anticipated by Elsner and request the withdrawal of this rejection to claim 1.

Finally, Clark recites a process of making hydraulic cement. However, Clark also fails to disclose liberating ammonia from the organic waste/mineral by-product mixture during the burning of the fuel to reduce NO_x emissions from exhaust gases. Therefore, Pennell, Elsner and Clark do not disclose this limitation in the claimed invention.

Nor does the hypothetical combination of Pennell, Elsner and Clark suggest or teach liberating ammonia from the organic waste/mineral by-product mixture during the burning of the fuel to reduce NO_x emissions from exhaust gases. Because the hypothetical combination of Pennell, Elsner and Clark does not suggest or teach all the limitations of the claimed invention, Applicants believe that claim 1 is patentable over the prior art and request the withdrawal of the rejection to claim 1.

Claims 4-9 and 11 depend on independent claim 1 and are patentable for the same reasons as independent claim 1 from which they depend. Therefore, Applicants believe claims 4-9 and 11 are also not anticipated by Pennell or Elsner and are also patentable over the cited art, and request the withdrawal of the rejection of claims 4-9 and 11.

CONCLUSION

For the above reasons, the Applicant respectfully submits that the above claims represent allowable subject matter. The Examiner is encouraged to contact the undersigned to resolve efficiently any formal matters or to discuss any aspects of the application or of this response. Otherwise, early notification of allowable subject matter is respectfully solicited.

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Respectfully submitted,
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